

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P179016

Luminaire Tested: **22ALNG-LD4-40-UNV-EL14W-L840-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P179016  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34296)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22ALNG-LD4-40-UNV-EL14W-L840-CD1-U  
Description: METALUX ARCLINE 2X2 TROFFER LUMINAIRE  
  
Light Source: EATON LED 4000K  
Ballast/Driver: OSRAM ELECTRONIC DRIVER

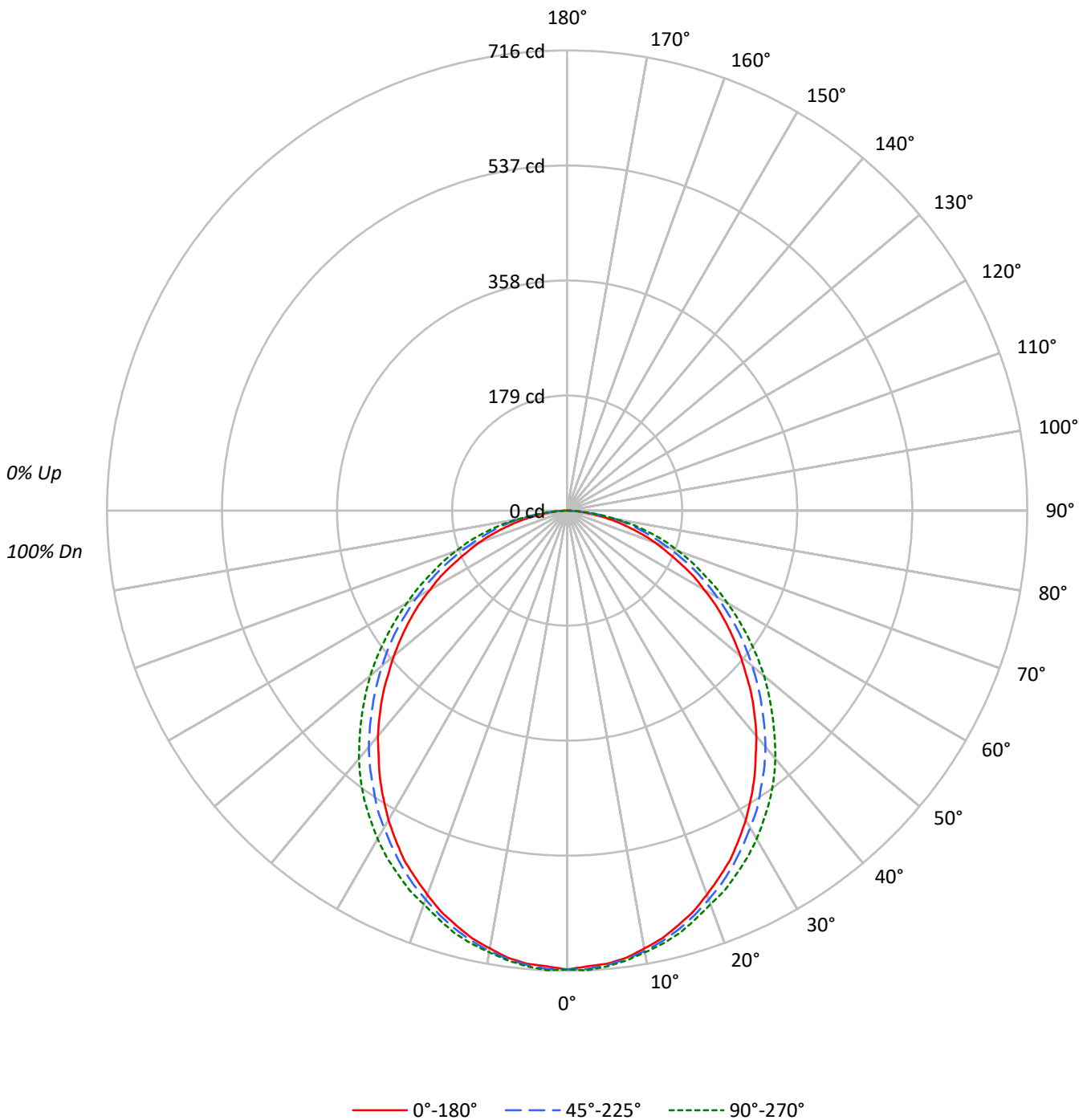
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1857.0 lumens  
Efficiency: N/A  
Efficacy: 145.1 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.23 / 1.31  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 2' x H: 0.27')  
CIE Type: Direct  
  
Input Watts (W): 12.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	59	52	47	57	51	46	44
6	71	57	49	42	69	57	48	42	55	47	42	53	46	41	51	46	41	39
7	66	52	44	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28
10	54	41	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1921	1921	1921
5°	1890	1886	1901
10°	1847	1839	1863
15°	1796	1786	1828
20°	1735	1724	1779
25°	1675	1662	1742
30°	1602	1595	1700
35°	1524	1523	1650
40°	1444	1452	1590
45°	1360	1367	1515
50°	1268	1281	1442
55°	1179	1193	1352
60°	1072	1091	1256
65°	957	984	1155
70°	837	856	1055
75°	677	728	925
80°	491	565	684
85°	267	271	315



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.3	3.6
10°-20°	189.8	10.2
20°-30°	281.2	15.1
30°-40°	329.9	17.8
40°-50°	330.2	17.8
50°-60°	288.1	15.5
60°-70°	214.0	11.5
70°-80°	124.8	6.7
80°-90°	31.7	1.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	538.3	29.0
0°-40°	868.2	46.8
0°-60°	1486.5	80.0
0°-90°	1857.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1857.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	714	714	714	714	714	
5°	708	708	710	712	712	67
15°	668	670	674	678	680	188
25°	600	602	610	620	624	276
35°	508	512	526	544	550	317
45°	406	410	428	444	452	313
55°	300	306	324	338	344	268
65°	194	202	218	228	234	193
75°	98	106	120	130	134	105
85°	22	26	28	26	26	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	713.9	713.9	713.9	713.9	713.9
2.5°	709.9	711.9	713.9	713.9	715.9
5°	707.9	707.9	709.9	711.9	711.9
7.5°	701.9	701.9	703.9	705.9	705.9
10°	691.9	691.9	695.9	697.9	697.9
12.5°	681.9	683.9	685.9	689.9	689.9
15°	667.9	669.9	673.9	677.9	679.9
17.5°	653.9	653.9	659.9	663.9	665.9
20°	635.9	637.9	643.9	649.9	651.9
22.5°	617.9	619.9	627.9	635.9	639.9
25°	599.9	601.9	609.9	619.9	623.9
27.5°	577.9	581.9	589.9	601.9	607.9
30°	555.9	559.9	569.9	583.9	589.9
32.5°	531.9	537.9	549.9	563.9	569.9
35°	507.9	511.9	525.9	543.9	549.9
37.5°	481.9	487.9	503.9	519.9	527.9
40°	457.9	461.9	479.9	495.9	503.9
42.5°	431.9	435.9	453.9	469.9	477.9
45°	405.9	409.9	427.9	443.9	451.9
47.5°	377.9	383.9	401.9	419.9	425.9
50°	351.9	359.9	375.9	391.9	399.9
52.5°	325.9	331.9	349.9	365.9	371.9
55°	299.9	305.9	323.9	337.9	343.9
57.5°	274.0	280.0	295.9	309.9	315.9
60°	246.0	252.0	270.0	282.0	288.0
62.5°	222.0	228.0	244.0	254.0	262.0
65°	194.0	202.0	218.0	228.0	234.0
67.5°	168.0	178.0	192.0	204.0	210.0
70°	146.0	154.0	166.0	178.0	184.0
72.5°	122.0	130.0	142.0	154.0	160.0
75°	98.0	106.0	120.0	130.0	134.0
77.5°	76.0	84.0	98.0	106.0	108.0
80°	56.0	64.0	76.0	78.0	78.0
82.5°	38.0	44.0	50.0	50.0	50.0
85°	22.0	26.0	28.0	26.0	26.0
87.5°	10.0	10.0	8.0	6.0	6.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)